REMARKS

Applicant thanks the Examiner for the thorough consideration given the present application.

Claims 1, 3-11, 13-15, and 17 are pending in this application. Claims 1 and 14 are independent. Claims 6, 7 and 9 are amended to correct a minor informality.

Reconsideration of this application is respectfully requested.

Objections of the Claims

Claims 6, 7, 9 and 11 are objected to under 37 CFR 1.75(c), a being of improper dependent form for failing to further limit the subject matter of the previous claim. Claims 6, 7 and 9 are amended to depend from claim 1, and claim 11 depends from claim 7. Accordingly, withdrawal of the objection to the claims is respectfully requested.

Rejections under 35 U.S.C. § 102(e)/§ 103(a)

Claims 1, 3-7, 9-11, 13-15 and 17 are rejected as being unpatentable over the so-called Applicant's admitted prior art in view of JP 5-323324 to Katsuto and U.S. Patent No. 5,954,999 to Mishina et al. These rejections are respectfully traversed.

Claims 1 and 14 recite a combination of steps in a method of manufacturing a liquid crystal display, including "heating the liquid crystal

cell, wherein the heating step is performed at a temperature that is greater than about 10°C above a nematic-isotropic transition temperature." Applicant respectfully submits that this limitation as recited in claims 1 and 14 is neither disclosed by nor obvious over the applied prior art of record, including Applicant's related art, Katsuto or Mishina et al.

As discussed in the Amendment filed on November 22, 2002, Applicant's related art merely teaches an LCD that includes upper and lower substrates, a liquid crystal layer between the two substrates, and upper and lower alignment layers coated on the inner surfaces of the upper and lower substrates, wherein the liquid crystal cell is heated at a temperature higher than a pneumatic, isotropic transition temperature. See the discussion at page 2, line 19, through page 3, line 12, of the present specification.

The Office Action concedes on page 3 that Applicant's related art fails to disclose that the heating step is performed at a temperature greater than about 10°C above a nematic-isotropic transition temperature as well as the step of quickly cooling the LCD cell. The Office Action relies on Katsuto for a teaching of an LCD element that is immediately placed flat on the surface of a rapid cooling plate to rapidly cool the LCD element from the heating temperature. Katsuto teaches that after the LCD element is heated, the LCD element is cooled within a short time. See column 5, paragraph 28. However, Katsuto

does not teach or suggest quickly cooling an individual LCD cell in accordance with the present invention.

The Office Action moreover appears to suggest that it is obvious to perform the heating step at a temperature greater than about 10°C above a nematic-isotropic transition temperature because Applicant's related art teaches that the LCD cell is heated at a temperature higher than a nematic-isotropic transition temperature. However, since the temperature range of greater than about 10°C above a nematic-isotropic transition temperature, as recited in independent claims 1 and 14, is not specifically disclosed in Applicant's related art, the Office Action has not established a *prima facie* case of obviousness, as required by M.P.E.P. § 2143. Accordingly, Applicant respectfully requests the Examiner to provide a reference teaching the above-cited limitation of claims 1 and 14, and to withdraw the finality of the Office Action since it is improper.

In rejecting claims 13 and 17, the Office Action relies on Mishina et al. for a teaching of a baking temperature of the alignment layer which can be selected from a range of from -5°C to 100°C. However, Mishina et al. discloses a reaction temperature for polymerizing the polyimide precursor, in column 4, lines 51-58, but does not disclose "a baking temperature of the alignment layer," as recited in claims 13 and 17. Furthermore, Mishina et al. does not

teach or suggest the above-cited limitation of claims 1 and 14, and therefore fails to cure the deficiencies of Applicant's related art and Katsuto.

In view of the foregoing, reconsideration and withdrawal of the rejections of the claims are respectfully requested. Independent claims 1 and 14 should be in condition for allowance. Since the remaining claims depend either directly or indirectly from allowable independent claims 1 and 14, they should also be allowable for at least the reasons set forth above, as well as for the additional limitations provided by these claims. Accordingly, all pending claims should be in condition for allowance.

CONCLUSION

Since the remaining patent cited by the Examiner has not been utilized to reject claims, but merely to show the state of the art, no comment need be made with respect thereto.

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. It is believed that a full and complete response has been made to the outstanding Office Action, and that the present application is in condition for allowance.

However, if any issues remain, the is invited to telephone Sam Bhattacharya, Reg. No. 48,107, at (703) 205-8000 in an effort to expedite prosecution.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17, particularly extension of time fees.

Respectfully submitted,
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Attachments
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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claims 6, 7 and 9 have been amended as follows:

6. (Amended) The method according to claim [2] 1, wherein the alignment layer is made of polyimide.

7. (Amended) The method according to claim [2] 1, wherein the alignment layer is made of a photo-alignment material.

9. (Amended) The method according to claim [2] 1, wherein the step of sealing further comprises the step of printing at least one of the substrates with a sealant.